UNITED STATES PATENT AND TRADEMARK OFFICE

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10/735,696	12/16/2003	Michael Man-Hak Tso	12487/10	8984

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EXAMINER
HAILE, AWET A

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2008*.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8-33* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-6 and 8-33* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Please note that AU 2616 has been changed to AU 2416

Response to Amendment

1.   **Claims 1-6 and 8-33** are pending on this application.

        Claim 7 is cancelled.

Response to Arguments

2.   Applicant's arguments filed on **10/08/2008** have been fully considered but they

are not persuasive.

        Regarding claim 1 and 30, the applicant argued that "… in Taylor the decision

of whether to store a message in non-volatile memory is based on whether that particular

message was successfully received. In contrast, the method of Applicants' claim 1 uses

historical data that is independent of the incoming data to determine whether to

employ stateless routing of the incoming data …" page 13, paragraph 1.

        In response to applicant's argument, the examiner respectfully disagrees.

        Taylor '573 teaches, based on predetermine conditions stored on the Message

Transfer Agent(notice, examiner interprets applicants "historical data" as Taylor '573's

predetermined conditions stored in MTA), determining whether to implement a fast path

MTA, which stores a message in a volatile memory as long as the message is not

exceeding the predetermined threshold value(see Fig. 4, step 402 and paragraphs 32-33)

or the standard path, which stores the message on non-volatile memory(see Fig. 4, step

403 and paragraphs 6-9, 32-33).

Regarding claim 23, the applicant argued that "…The combination of Taylor and

Salisbury does not render claim 23 obvious because the combination does not disclose or

suggest "determining that stateless routing of the message is to be employed based on the

historical data and control data…" page 14, paragraph 2.

In response to applicant's argument, the examiner respectfully disagrees.

Taylor '573 teaches, determining that stateless routing of the message is to be

employed based on the historical data(predetermined conditions) and control data(

source and destination address of the message)(see paragraphs 6-9, 32-33 and Figs 2-4,

i.e. based on the predetermined conditions stored at the MTA server and destination

address received with the incoming message, determining whether to implement the fast

path MTA 402, which stores a message in a volatile memory as long as the message is

not exceeding the predetermined threshold value) thus, Taylor '573 teaches argued

limitations.

Claim Rejection – 35 USC§ 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

4.   **Claims 1-6, 8-22 and 30-33** are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

       Regarding claim 1, line 3, the occurrence of "the destination host" has no

antecedent basis, similar problem exist, on claim 30, line 3.

       Claims 2-6, 8-22 and 31-33 are rejected as being dependent of the rejected

claims.

Claim Rejections – 35 USC§ 101

5.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions
and requirements of this title.

6.   **Claims 1-6 and 8-33** are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

       Claims 1-6 and 8-29 are rejected under 35 U.S.C. 101 as not falling within one of

the four statutory categories of invention. While the claims recite a series of steps or acts

to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another

statutory category (such as a particular apparatus), or (2) transform underlying subject

matter (such as an article or material) to a different state or thing (Reference the May 15,

2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J.

Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant **1-6 and 8-29** neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Furthermore, the claims (i.e., particularly claim 1, 23) recite purely mental steps (i.e. determining whether to employ stateless routing) without tying the steps to one of the four statutory categories of invention recited in USC § 101.

Claim Rejections – 35 USC§ 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   **Claims 1-6, 8, 11, 13, 22 and 30-33** are rejected under 35 U.S.C. 102(e) as being anticipated by Taylor (US 2003/0135573 A1).

Regarding claim 1, Taylor '573 discloses, a method of processing incoming data (see Figs. 2-4 and paragraph 32, i.e. processing incoming data from Message Transfer Agents (MTA) servers) comprising: storing historical data for the destination host (see paragraph 32, 33 and Fig. 4, i.e. message receiving MTA server storing predetermined

conditions related to the destination clients); receiving incoming data(see paragraph 32

and Figs. 3-4 steps 302, i.e. MTA server receiving bytes via the internet 103);

and determining that stateless routing of the incoming data is to be employed

based on the stored historical data for the destination host associated with the incoming

data(see paragraphs 6-9, 32-33 and Figs 2-4, i.e. based on the predetermined conditions

stored at the MTA server, determining whether to implement the fast path MTA 402,

which stores a message in a volatile memory as long as the message is not exceeding the

predetermined threshold value), wherein the stored historical data is independent of the

incoming data(see paragraph 32-33, i.e. storing predetermined conditions related to the

destinations clients, thus independent of the incoming data).

Regarding claim 2, Taylor '573 discloses, storing the incoming data only in

volatile memory when stateless routing is to be employed (see paragraphs 9, 32-33 and

Fig 2-4, i.e. storing incoming messages only in a memory/volatile if the fast path is

selected in step 402 and the message is less than a predetermined threshold).

Regarding claim 3, Taylor '573 discloses, withholding confirmation of receipt of

the incoming data until confirmation of delivery is received from either the destination

host or a downstream router(see Fig. 3A -3B, steps 303, 304 , 310-314 and paragraphs

26-31, notice, if the message is stored on memory/volatile withhold confirmation until

message is received by all destinations).

Regarding claim 4, Taylor '573 discloses, wherein a copy of the incoming data is to be stored in nonvolatile memory by a sender of the incoming data until the confirmation of receipt is received at the sender (see Fig. 3B, steps 319 and 320, i.e. removing messages from non volatile memory step 320 upon receiving a confirmation from the destination device).

Regarding claim 5, Taylor '573 discloses, receiving the confirmation of delivery (see Fig. 3B, step 312, i.e. verifying delivery of messages to the destination device); and sending the confirmation of receipt toward a sender of the incoming data (see Fig. 3B, step 314, i.e. responding to the sender of the message, to inform successfully delivery of message).

Regarding claim 6, Taylor '573 discloses, further including aborting the stateless routing by storing the incoming data in nonvolatile memory and sending confirmation of receipt of the incoming data toward a sender of the incoming data (see Fig. 3A -3B, steps 303, 309, 316 and 317, i.e. if a decision is made to store received data in a non volatile memory (non stateless routing), confirmation is sent to the message sender (see step 317)).

Regarding claim 8, Taylor '573 discloses, wherein the historical data includes at **least one of** previous stateless routing outcomes and previous routing latencies (see Fig. 3B, i.e. determining whether messages routed successfully, if not store messages in non volatile memory).

     Regarding claim 11, Taylor '573 discloses, receiving control data (see Fig. 3A,

step 302 and Fig. 4, step 302 i.e. receiving source and destination address with the

incoming message); wherein the determination to employ stateless routing is also based

on the control data (see paragraphs 32-33 and Fig. 4, i.e. the MTA server comparing the

destination address received with the incoming data with a predetermined conditions

stored for the destination client).

     Regarding claim 13, Taylor '573 discloses, wherein the incoming data and the

control data are received in a data channel (Fig. 3A, step 302, i.e. receiving messages

with a source and destination information).

     Regarding claim 22, Taylor '573 discloses, wherein the incoming data includes a

message (Fig. 3A, step. 302, i.e. receive bytes of message over the network connection).

     Regarding claim 30, Taylor '573 discloses, a computer readable medium

encoded with computer executable instructions to: store historical data for the destination

host (see paragraphs 32, 33 and Fig. 4, i.e. message receiving MTA server storing

predetermined conditions related to the destination clients); receiving incoming data (see

paragraph 32 and Figs. 3-4 steps 302, i.e. MTA server receiving bytes via the internet

103),

     determine that stateless routing of the incoming data is to be employed based on

the historical data for the destination host associated with the incoming data (see

paragraphs 6-9, 32-33 and Figs 2-4, i.e. based on the predetermined conditions stored at

the MTA server, determining whether to implement the fast path MTA 402, which stores

a message in a volatile memory as long as the message is not exceeding the

predetermined threshold value); wherein the stored historical data is independent of the

incoming data(see paragraph 32-33, i.e. storing predetermined conditions related to the

destinations clients, thus independent of the incoming data).

   Regarding claim 31, Taylor '573 discloses, determining that stateless routing is

to be employed (see paragraphs 6-9, 32-33 and Figs 2-4, i.e. based on the predetermined

conditions stored at the MTA server, determining whether to implement the fast path

MTA 402, which stores a message in a volatile memory as long as the message is not

exceeding the predetermined threshold value); and storing the incoming data only in

volatile memory (see paragraphs 9, 32-33 and Fig 2-4, i.e. storing incoming messages

only in a memory/volatile if the fast path is selected in step 402 and the message is less

than a predetermined threshold).

   Regarding claim 32, Taylor '573 discloses, withholding confirmation of receipt

of the incoming data until confirmation of delivery is received from either the destination

host or a downstream router(see Fig. 3A -3B, steps 303, 304 , 310-314 and paragraphs

26-31, notice, if the message is stored on memory/volatile withhold confirmation until

message is received by all destinations).

Regarding claim 33, Taylor '573 discloses, wherein a copy of the incoming

data is to be stored in nonvolatile memory by a sender of the incoming data until the

confirmation of receipt is received at the sender (see Fig. 3B, steps 319 and 320, i.e.

removing messages from non volatile memory step 320 upon receiving a confirmation

from the destination device).

Claim Rejections – 35 USC§ 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

    1.   Determining the scope and contents of the prior art.
    2.   Ascertaining the differences between the prior art and the claims at issue.
    3.   Resolving the level of ordinary skill in the pertinent art.
    4.   Considering objective evidence present in the application indicating
            obviousness or nonobviousness.

11.   **Claims 20, 21, 23 -25 and 29** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Taylor '573 in view of Salisbury (US 6483834 B1).

Regarding claim 20, Taylor '573 discloses, wherein the incoming data is received over a first connection (see Fig. 1, i.e., Server 101 receiving messages from server 102 via the internet), the method further including sending the incoming data toward the destination host over a second connection (see Fig. 1, i.e. server 101 communicating with clients 104 -106).

Taylor '573 is silent on, the first and second connections being part of a virtual circuit.

Salisbury '834 teaches, the first and second connections being part of a virtual circuit (see Fig. 1 and 2, i.e. ATM switch comprising multiple virtual channels).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate, the method of communicating with other devices via a virtual channels as taught by Salisbury '834 into the server 101 of Taylor '573, in order to create a switching a switched virtual circuit that will not only meet the arrival time and order requirements but will also insure that no data are lost during the transmission, since such method is suggested by Salisbury '834 (see column 2, lines 11-14).

Regarding claim 21, Taylor '573 discloses, wherein the sending of the message begins before completion of the receiving of the message (see Fig. 3B, steps 312 – 316,

i.e. if received data is stored in a memory forwarding to the destination devices before

completion of receiving).

Regarding claim 23, Taylor '573 discloses, a method of processing messages

comprising (see abstract and Fig.1, i.e. a method of processing data received at server101

from client computers or server102 is disclosed):

storing historical data for one or more destination hosts (see paragraphs 32, 33

and Fig. 4, i.e. message receiving MTA server storing predetermined conditions related to

the destination clients); receiving control data (Fig. 1, shows client 104 -16 connecting to

the server 101, thus, in order to forward messages to one of the destination clients server

101 must receive control data with the messages, therefore, receiving control data is an

inherent future of Taylor '573 server);

receiving a message over a first connection (see Fig. 3A, step 302 and paragraph

26, i.e. MTA server receiving messages from another MTA server over the network), the

message being associated with the one or more destination hosts (see Fig. 1, paragraph 4

and 5, i.e. server 101 receiving messages destined to clients 104 -106); determining

whether to employ stateless routing of the message based on the historical data and the

control data (see paragraphs 6-9, 32-33 and Figs 2-4, i.e. based on the predetermined

conditions stored at the MTA server and destination address received with the incoming

message, determining whether to implement the fast path MTA 402, which stores a

message in a volatile memory as long as the message is not exceeding the predetermined

threshold value),

storing the message only in volatile memory and withholding confirmation of

receipt of the message if it is determined that stateless routing is to be employed(see Fig.

3A -3B, steps 303, 304 , 310-314 and paragraphs 26-31, notice, if the message is stored

on memory/volatile withhold confirmation until message is received by all destinations);

receiving confirmation of delivery from one or more destination hosts associated with the

message(see Fig. 312, and sending the confirmation of receipt to a sender of the

message).

Taylor '573 is silent on, sending the message to the one or more destination hosts

over additional connections forming one or more virtual circuits.

Salisbury '834, teaches, sending the message to the one or more destination hosts

over additional connections forming one or more virtual circuits (see column 1, lines 54-

column 2, line10, i.e. creating a virtual circuits based on the amount of received/stored

data).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method of creating a virtual circuit based

on the amount of data received as taught by Salisbury '834 into the server 101 of Taylor

'573, in order to create a switched virtual circuit that will not only meet the arrival time

and order requirements but will also insure that no data are lost during the transmission,

since such method is suggested by Salisbury '834 (see column 2, lines 11-14).

Regarding claim 24, Taylor '573 discloses, wherein a copy of the incoming data

is to be stored in nonvolatile memory by a sender of the incoming data until the

confirmation of receipt is received at the sender (Fig. 3B, steps 319 and 320, i.e.

removing messages from non volatile memory step 320 upon receiving a confirmation

from the destination device).

Regarding claim 25, Taylor '573 discloses, wherein the historical data includes

at **least one of** previous stateless routing outcomes and previous stateless routing

latencies (see Fig. 3B, i.e. determining whether messages routed successfully, if not store

messages in non volatile memory).

Regarding claim 29, Taylor '573 discloses, wherein the sending of the message

begins before completion of the receiving of the message (see Fig. 3B, steps 312 – 316,

i.e. if received data is stored in a memory forwarding to the destination devices before

completion of receiving).

12.   **Claims 9, 10, 18 and 19** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Taylor '573 in view of Hannel et al (US 7194535 B2).

Regarding claim 9, Taylor '573 failed to teach, calculating a success rate probability based on the previous routing outcomes.

Hannel '535 teaches, calculating a success rate probability based on the previous routing outcomes (see column 7, lines 18-39, i.e. determining the rate of connections being drooped).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate, the method of determining the rate of packet drop as taught by Salisbury '834 into the server 101 of Taylor '573, in order to determine a packet retransmission rate, since such method is suggested by Salisbury '834(see column 32-35).

Regarding claim 10, Taylor '573 failed to teach, calculating a weighted latency average based on the previous routing latencies.

Hannel '535 teaches, calculating a weighted latency average based on the previous routing latencies (see column 7, lines 52-59 i.e. calculating the number of packets that can be processed per second).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate, the method of calculating the average packet processing time as taut by Hannel '535 into the into the server 101 of Taylor '573, in

order to determine a packet retransmission rate, since such method is suggested by

Hannel '535 (see column 32-35).

Regarding claim 18, Taylor '573 failed to teach, further including generating a

probability decision representative of whether stateless routing is to be employed.

Hannel '535 teaches, generating a probability decision representative of whether

stateless routing is to be employed (see column 3, lines 25 - 41 and fig 4, step ST4, i.e.

performance and behavior of the stateless and stateful connections measured in order to

determine the type of connection needed).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method of generating packet

transmission rate as taught by Hannel '535 into the server101 of Taylor '573, in order to

determine a packet retransmission rate, since such method is suggested by Hannel '535

(see column 32-35).

Regarding claim 19, Taylor '573 teaches, wherein the incoming data is

associated with a plurality of destination hosts (see Fig. 1, Server 101 communicating

with plurality of destination clients).

Taylor '573 is silent on, the method further including: generating a probability

decision for each of the plurality of destination hosts; and multiplying the probability

decisions together to represent whether stateless routing is to be employed.

Hannel '535, the method further including: generating a probability decision for

each of the plurality of destination hosts and multiplying the probability decisions

together to represent whether stateless routing is to be employed (see column 3, lines 25 -

41 and fig 4, step ST4, i.e. performance and behavior of the stateless and stateful

connections measured in order to determine the type of connection needed).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method of generating packet

transmission rate as taught by Hannel '535 into the server101 of Taylor '573, in order to

determine a packet retransmission rate, since such method is suggested by Hannel '535

(see column 32-35).

13.   **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor

'573 in view of Xiong et al (US 6721315 B1).

Regarding claim 12, Taylor '573 failed to teach, wherein the incoming data is

received in a data channel and the control data is received in a control channel.

Xiong '315 teaches wherein the incoming data is received in a data channel and

the control data is received in a control channel (see column 5, lines 42-55, i.e. receiving

data and control data via multiple data and control channels respectively).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method of receiving data on data channel

and control data on control channel as taught by Xiong '315 into the server 101 of Taylor

'573, in order to provide an end to end communication path via server 101, since such

method is suggested by Xiong '315(see column 2, lines 1-5).

14.   **Claims 14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Taylor '573 in view of Nielsen et al (US 20003/0074413 A1).

Regarding claim 14, Taylor '573 failed to teach, wherein the control data

includes at least one of a time-to-live value, a hop count value and a maximum- hop

value for the incoming data.

Nielsen '413 teaches, wherein the control data includes at least one of a time-to-

live value, a hop count value and a maximum- hop value for the incoming data (see

paragraph 50, i.e., receiving a packet with time information).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method receiving a control data with a

time to live information as taught by Nielsen '413, into the server 101 of Taylor '573, in order to ensure that the message is routed through an intermediary that provides a value added service, since such method is suggested by Nielsen '413(paragraph 50).

Regarding claim 15, Taylor '573 failed to teach, reducing at least one of the time-to-live value and the maximum-hop value if the incoming data is associated with a plurality of destination hosts.

Nielsen '413 teaches, reducing at least one of the time-to-live value and the maximum-hop value if the incoming data is associated with a plurality of destination hosts (see paragraph 53, i.e., determining the time to live value based on routing table information associated with the destination).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate, the method of reducing the time-to-live value as taught by Nielsen '413, into the server 101 of Taylor '573, in order to ensure that the message is routed through an intermediary that provides a value added service, since such method is suggested by Nielsen '413(paragraph 50).

15.   **Claims 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor '573 in view of Saliga (us 3870828).

Regarding claim 16, Taylor '573 failed to teach, either caching or generating a binary decision representative of whether stateless routing is to be employed.

Saliga '828 teaches, either caching or generating a binary decision representative of whether stateless routing is to be employed (see column 3, lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate, the method of generating a binary decision representative as taught by Saliga '828 into the server 101 of Taylor '573, in order to add a supervisory signaling system that requires no additional bandwidth with only minor decreases in overall primary channel performance, since such method is suggested by Saliga '828(see column 2, lines 62-65).

Regarding claim 17, Taylor '573 failed to teach, generating a binary decision for each of the plurality of destination hosts; and performing an AND operation between each of the binary decisions to represent whether stateless routing is to be employed.

Saliga '828 teaches, generating a binary decision for each of the plurality of destination hosts (see column 3, lines 13-19, i.e. a binary representing the destination devices); and performing an AND operation between each of the binary decisions to represent whether stateless routing is to be employed (Fig, 3, i.e. deciding how to route the data based on AND operation of the switch).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method of generating a binary decision

representative as taught by Saliga '828 into the server 101 of Taylor '573, in order to add

a supervisory signaling system that requires no additional bandwidth with only minor

decreases in overall primary channel performance, since such method is suggested by

Saliga '828(see column 2, lines 62-65).

16.   **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor

'573 and Salisbury '834 as applied to claim 23 above, and further in view of Nielsen

'413.

        Regarding claim 26, Taylor '573 and Salisbury '834 failed to teach, wherein the

control data includes at least one of a time-to-live value, a hop count value and a

maximum- hop value for the incoming data.

        Nielsen '413 teaches, wherein the control data includes at least one of a time-to-

live value, a hop count value and a maximum- hop value for the incoming data (see

paragraph 50, i.e., receiving a packet with time information).

        Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method receiving a control data with a

time to live information as taught by Nielsen '413, into the server 101 of Taylor '573, in

order to ensure that the message is routed through an intermediary that provides a value

added service, since such method is suggested by Nielsen '413(paragraph 50).

17.   **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor

'573 and Salisbury '834 as applied to claim 23 above, and further in view of Saliga '828.

Regarding claim 27, Taylor '573 and Salisbury '834 failed to teach, either

caching or generating a binary decision representative of whether stateless routing is to

be employed.

Saliga '828 teaches, generating a binary decision representative of whether

stateless routing is to be employed (see column 3, lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate, the method of generating a binary decision

representative as taught by Saliga '828 into the server 101 of Taylor '573, in order to add

a supervisory signaling system that requires no additional bandwidth with only minor

decreases in overall primary channel performance, since such method is suggested by

Saliga '828(see column 2, lines 62-65).

18.   **Claim 28** is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor

'573 and Salisbury '834 as applied to claim 23 above, and further in view of Hannel '535.

Regarding claim 28, Taylor '573 and Salisbury '834 failed to teach, further including generating a probability decision representative of whether stateless routing is to be employed.

Hannel '535 teaches, generating a probability decision representative of whether stateless routing is to be employed (see column 7, lines 52-59 i.e. calculating the number of packets that can be processed per second).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate, the method of calculating the average packet processing time as taut by Hannel '535 into the into the server 101 of Taylor '573, in order to determine a packet retransmission rate, since such method is suggested by Hannel '535 (see column 32-35).

19.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

Conclusion

20.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure, Obrien et al(US 6351776 B1), Horvitz et al(US 2003/0101190

A1), Bracewell et al(US 2006/0036683 A1), Anson et al(US 2002/0116524 A1) are

recited to show stateless routing.

21.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AWET HAILE whose telephone number is (571)270-

3114. The examiner can normally be reached on Monday through Friday 8:30 AM - 4:30

PM EST.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Aung Moe can be reached on (571)272-3474. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/   /AWET HAILE/
Supervisory Patent Examiner, Art Unit 2416   Examiner, Art Unit 2416